# IV. TECHNICAL SESSIONS

## SESSION 1 – FUTURE FLEET PREDICTIVE CAPABILITY

**CHAIR**
Mark Pointon, U.S. Army Corps of Engineers, Institute for Water Resources

Ian Mathis, U.S. Army Corps of Engineers, Institute for Water Resources

**COORDINATOR**
Phillip Thorpe, U.S. Army Corps of Engineers, Institute for Water Resources

**TITLE OF PRESENTATIONS AND SPEAKERS**
"International Trade Forecasting" by Robert West, DRI-WEFA

"Future Fleet Predictive Capability: NDNS Fleet Forecast Update" by Michael Sclar, Michael L. Sclar Associates, Inc.

"Future U.S. Vessel Constraints" by Phillip Thorpe, U.S. Army Corps of Engineers

**SUMMARY**
International Trade Forecasting.
In his presentation, Mr. Robert West emphasized the importance of understanding cargo movements in order to predict fleet demand. His organization developed a unique data set covering bilateral, global trade defined by 54 countries and 16 regions. He reviewed several charts which project the annual growth of total container trade and sea borne imports by coast, until the year 2020. He also provided information on gulf exports and top ten exported goods for 2001.

Future Fleet Predictive Capability: NDNS Fleet Forecast Update
Mr. Michael Sclar provided an informative presentation on the latest NDNS fleet forecast, an update of the 1996-based system using a year 2000 base which identifies historical trends and provides a current capability for predicting future fleets and port and terminal requirements. Its objective is to develop a forecast of trade and vessel calls by vessel type and size by port, trade partner region, and commodity to support port project planning and evaluation. Mr. Sclar discussed the fleet forecast procedures, data sources, and database dimensions. He also provided sample analyses, showing charts from years 2000 through 2050 with data such as total exports and imports; exports by region; and import container tons.

Future U.S. Vessel Constraints
Mr. Phillip Thorpe started his presentation by outlining the objectives and accomplishments of the National Dredging Needs Study, which provided an assessment of the future national waterside infrastructure needs. He then displayed several charts to show the tonnage and value of U.S. trade by world region and coast; distribution of dry bulk and containership vessels; forecast of annual vessel calls on various coasts; and the constrained vessel calls with and without Corps projects. International trade is expected to grow by 4-5 percent annually – this growth will cause increased congestion and industry consolidation. Industry consolidation will result in larger vessels and traffic consolidation (hub ports), requiring

deeper channels and increased port capacity.